

REMARKS

Claims 1, 2, 4-10, 12-18, 20-24, 30, and 31 were pending and were rejected. Claims 30 and 31 have been amended herein, and new claims 32-36 have been added. Accordingly, claims 1, 2, 4-10, 12-18, 20-24, and 30-36 are pending. In view of the amendment to the claims and the following remarks, reconsideration of the application is respectfully requested.

Response to 35 U.S.C. § 103(a) Rejections

Claims 1-2, 4-10, 12-18, 20-24, and 30-31 are rejected under 35 U.S.C. §103(a) as being unpatentable over Singer (U.S. Patent No. 6,314,473 B1) in view of Funches (U.S. Patent No. 5,305,160), and further in view of Stancil (U.S. Patent No. 6,601,168 B1). This rejection is respectfully traversed as to claims 1-2, 4-10, 12-18, 20-24, and 30-31.

As the PTO recognizes in MPEP §2142:

The examiner bears the initial burden of factually supporting any prima facie conclusion of obviousness. If the examiner does not produce a prima facie case, the applicant is under no obligation to submit evidence of nonobviousness.

Method Claims

As to claim 1, the rejection fails to establish a *prima facie* case of obviousness for the following reasons.

35 U.S.C. §103(a) provides that:

[a] patent may not be obtained ... if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains ... (emphasis added)

Thus, when evaluating a claim for determining obviousness, all limitations of the claim must be evaluated. The references applied to claim 1 do not appear to teach all limitations of that claim.

According to the rejection, Singer teaches the claim 1 limitation "making corresponding adjustments by at least one power management system in the computer," i.e., at Singer col. 7, line 62 to col. 8, line 8 and Figures 4-8. Applicant has reviewed these citations to Singer, and respectfully disagrees.

In the method of claim 1, the adjustments made by the power management system correspond to the adjusting of the operational level (including adjusting seek time) to achieve the selected acoustic level. Singer, on the other hand, merely provides the user with a separate

control (see Figs. 6-8) for adjusting power consumption *separately* from the adjustment of noise level, but not corresponding to adjustments to achieve a selected acoustic level. Applicant was unable to locate any teaching in Singer, Funches, and Stancil of a power management system making adjustments corresponding to adjustments made in seek time to achieve a selected acoustic level.

According to the Examiner, the management system of Singer in view of Funches does not clearly mention the claim 1 limitation of performing a post-test to determine if further adjustment is desired, but Stancil teaches changing/adjusting the speed of a device by constantly monitoring an audio noise and temperature of the system. To Applicant's reading, Stancil's CPU merely instructs a fan controller to change fan speed in response to changes in a measured CPU temperature. Fan speed changes are then made according to a stored "ramp rate." Audio noise is neither monitored nor "post-tested," as the fan will adjust at the ramp rate to whatever speed (and audio noise) is required to adequately cool the CPU. Applicant therefore fails to see how operating a closed-loop fan control system to control temperature – not audio level – teaches or suggests, to one adjusting an operational level to achieve a selected acoustic level and making corresponding adjustments by at least one power management system, "performing a post-test to determine if further adjustment is desired."

Claims 2 and 4-8 depend from claim 1, and are patentable at least for the reasons presented above for the patentability of claim 1.

Further, as to claim 4, the rejection asserts that Stancil clearly shows adjusting the speed of fans in the computer system. Claim 4, however, requires that "adjusting the speed of an internal fan" occur as part of "adjusting an operational level of at least one subsystem of the computer to achieve the selected acoustic level." Stancil adjusts the speed of a fan to achieve a desired CPU temperature, not a selected acoustic level. Neither the references, nor the rejection, shows any teaching, suggestion, or motivation, to modify Stancil's temperature control system to achieve a selected acoustic level rather than a desired CPU temperature.

As to claim 5, according to the rejection Stancil teaches that the adjusting an operational level of at least one subsystem of the computer comprises making corresponding adjustments to overall operation of a portion of the computer to maintain a heat production level of the computer at a level that can be managed by the internal fan operating at the adjusted speed. While Stancil does teach changing the fan speed according to the temperature, it does not teach maintaining a heat production level at a level that can be managed by the internal fan operating at the adjusted speed. If the heat production level is not being adequately managed

at a current fan speed, the CPU temperature will rise, and the fan speed will be adjusted accordingly (see, e.g., col. 4, ll. 53-58.) Thus the references fail to teach the limitations added by claim 5.

As to claim 6, according to the rejection, Singer teaches that the adjusting of an operational level of at least one subsystem of the computer is performed using redefined power management levels of the computer. Singer provides the user with a separate control (see Figs. 6-8) for adjusting power consumption *separately* from the adjustment of noise level, but not corresponding to adjustments to achieve a selected acoustic level. The applied references fail to teach that the adjusting of an operational level of at least one subsystem of the computer to achieve a selected acoustic level is performed using redefined power management levels of the computer.

As to claim 7, neither the references nor the rejection evidences a teaching of the adjusting of an operational level of at least one subsystem of the computer to achieve a selected acoustic level that comprises adjusting a speed of a peripheral bus, with corresponding adjustments to a speed of at least one peripheral device connected to the peripheral bus. Applicant could find no mention of changing the speed of a peripheral bus, with corresponding adjustments to a speed of a peripheral device connected to the peripheral bus in Singer, Funches, and Stancil, and none was cited by the Examiner.

As to claim 30, although claim 30 pertains to a media drive rather than a hard disk drive, claim 30 is patentable for at least the same reasons that claim 1 presented above for the patentability of claim 1.

As shown above, the references, even if combined, do not teach all of the elements of claims 1-2, 4-8, and 30. Therefore, the subject matter of claims 1-2, 4-8, and 30 cannot be obvious based on any combination of Singer, Funches, and Stancil, and the above explicit terms of the statute cannot be met. As a result, the Examiner's burden of factually supporting a *prima facie* case of obviousness cannot be met with respect to claims 1-2, 4-8, and 30. Withdrawal of the rejection of these claims under 35 U.S.C. §103(a) is respectfully requested.

System Claims

As to claim 9, although claim 9 and claim 1 are different claims, claim 9 is patentable for similar reasons as those mentioned above for claim 1.

As to claim 10, although claim 10 and claim 2 are different claims, claim 10 is patentable for similar reasons as those mentioned above for claim 2.

As to claim 12, although claim 12 and claim 4 are different claims, claim 12 is patentable for similar reasons as those mentioned above for claim 4.

As to claim 13, although claim 13 and claim 5 are different claims, claim 13 is patentable for similar reasons as those mentioned above for claim 5.

As to claim 14, although claim 14 and claim 6 are different claims, claim 14 is patentable for similar reasons as those mentioned above for claim 6.

As to claim 15, although claim 15 and claim 7 are different claims, claim 15 is patentable for similar reasons as those mentioned above for claim 7.

As to claim 16, although claim 16 and claim 8 are different claims, claim 16 is patentable for similar reasons as those mentioned above for claim 8.

As to claim 31, although claim 31 and claim 1 are different claims, claim 31 is patentable for similar reasons as those mentioned above for claim 1.

As shown above, the references, even if combined, do not teach all of the elements of claims 9-10, 12-16, and 31. Therefore, the subject matter of claims 9-10, 12-16, and 31 cannot be obvious based on any combination of Singer, Funches, and Stancil, and the above explicit terms of the statute cannot be met. As a result, the Examiner's burden of factually supporting a *prima facie* case of obviousness cannot be met with respect to claims 9-10, 12-16, and 31. Withdrawal of the rejection of these claims under 35 U.S.C. §103(a) is respectfully requested.

Computer Claims

As to claim 17, although claim 17 and claim 1 are different claims, claim 17 is patentable for similar reasons as those mentioned above for claim 1.

As to claim 18, although claim 18 and claim 2 are different claims, claim 18 is patentable for similar reasons as those mentioned above for claim 2.

As to claim 20, although claim 20 and claim 4 are different claims, claim 20 is patentable for similar reasons as those mentioned above for claim 4.

As to claim 21, although claim 21 and claim 5 are different claims, claim 21 is patentable for similar reasons as those mentioned above for claim 5.

As to claim 22, although claim 22 and claim 6 are different claims, claim 22 is patentable for similar reasons as those mentioned above for claim 6.

As to claim 23, although claim 23 and claim 7 are different claims, claim 23 is patentable for similar reasons as those mentioned above for claim 7.

As to claim 24, although claim 24 and claim 8 are different claims, claim 24 is patentable for similar reasons as those mentioned above for claim 8.

As shown above, the references, even if combined, do not teach all of the elements of claims 17-18, and 20-24. Therefore, the subject matter of claims 17-18, and 20-24 cannot be obvious based on any combination of Singer, Funches, and Stancil, and the above explicit terms of the statute cannot be met. As a result, the Examiner's burden of factually supporting a *prima facie* case of obviousness cannot be met with respect to claims 17-18, and 20-24. Withdrawal of the rejection of these claims under 35 U.S.C. §103(a) is respectfully requested.

New Claims

New claims 32-36 are presented and are believed to be allowable over the prior art of record. New claim 32 recites "selecting an operational level of a cooling subsystem in response to a user input indicating a desired acoustic level; and adjusting operation of at least one computer component to maintain a thermal profile manageable by the cooling subsystem operating at the selected speed." Singer in view of Funches, and further in view of Stancil does not teach selecting an operational level of a cooling subsystem in response to a user input indicating a desired acoustic level; and adjusting operation of at least one computer component to maintain a thermal profile manageable by the cooling subsystem operating at the selected speed.

New claim 33 recites "[t]he method of claim 32 wherein the cooling subsystem is a system fan." Singer in view of Funches, and further in view of Stancil does not teach the method of claim 32 wherein the cooling subsystem is a system fan.

New claim 34 recites "[t]he method of claim 32 wherein the cooling subsystem is a processor fan." Singer in view of Funches, and further in view of Stancil do not teach the method of claim 32 wherein the cooling subsystem is a processor fan.

New claim 35 recites "[t]he method of claim 32 further comprising accepting user input via an interface." Singer in view of Funches, and further in view of Stancil, alone or in combination, do not teach the method of claim 32 further comprising accepting user input via an interface.

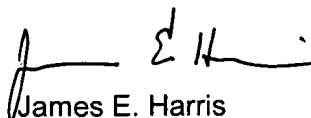
New claim 36 recites "[t]he method of claim 32 further comprising adjusting a seek time of the hard disk drive of the computer." Singer in view of Funches, and further in view of Stancil, alone or in combination, do not teach the method of claim 32 further comprising adjusting a seek time of the hard disk drive of the computer.

Conclusion

In view of all of the above, the allowance of claims 1-2, 4-10, 12-18, 20-24, and 30-36 is respectfully requested.

The examiner is invited to call the undersigned at the below-listed telephone number if a telephone conference would expedite or aid the prosecution and examination of this application.

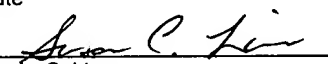
Respectfully submitted,



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on	<u>Mar 15, 2006</u>
Date	
	
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